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DATE MAILED: 03/11/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

35699 7590 03/11/2008 PVF -- PARC

c/o PARK, VAUGHAN & FLEMING LLP 2820 FIFTH STREET DAVIS, CA 95618-7759 EXAMINER
DAVIS, ZACHARY A
ART UNIT PAPER NUMBER

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,296	07/18/2003	W. Keith Edwards	PARC-DA3285	4686

TITLE OF INVENTION: SYSTEM AND METHOD FOR SECURELY CONTROLLING COMMUNICATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/11/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence including ed below or directed of tions.	ng the Patent, advance on nerwise in Block 1, by (rders and notification of a) specifying a new corre	naintenance fees v spondence address	vill be ; and/o	mailed to the current r (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
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DAVIS, CA 956	18-7759						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/623,296	07/18/2003	•	W. Keith Edwards		F	ARC-DA3285	4686
TITLE OF INVENTION	SYSTEM AND METI	IOD FOR SECURELY C	CONTROLLING COMMU	NICATIONS			
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Number is required.			listed, no name will be	•			
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recordation as set fort	h in 37 CFR 3.11. Com	pletion of this form is NO	T a substitute for filing an	atent. It an assigi assignment.	iee is io	tentined below, the d	ocument has been filed for
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Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual 🚨 C	orporati	ion or other private gro	oup entity Government
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Ples	ise first reapply a	ny prev	lously paid issue fee	shown above)
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			overpayment, to Depo	sit Account Numb	er	(enclose a	n extra copy of this form).
5. Change in Entity Sta	tus (from status indicate is SMALL ENTITY stati		☐ b. Applicant is no lon	ger claiming SMA	LL.EN	FITY status Sec 37 Cl	R 1.27(e)(2)
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Authorized Signature				Date			
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PVF PARC			DAVIS, ZA	CHARY A
	GHAN & FLEMING LI	P	ART UNIT	PAPER NUMBER
2820 FIFTH STREET DAVIS, CA 95618-7759			2137	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 746 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 746 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/623,296	EDWARDS ET AL.
Examiner	Art Unit
Zachary A Davis	2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included tive

	TENT RIGHTS. This application is subject to withdrawal from issue at the initial R 1.313 and MPEP 1308.
1. This communication is responsive to the amendment	ent received 02 January 2008.
2. The allowed claim(s) is/are 1-5,7-16,18-27 and 29	<u>-33</u> .
Copies of the certified copies of the pr International Bureau (PCT Rule 17.2(s Certified copies not received:	nts have been received. Ints have been received in Application No Introduce the content of this national stage application from the stage application from the stage application from the stage application from the stage application for this application.
	be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF hich gives reason(s) why the oath or declaration is deficient.
T) hereto or 2) to Paper No./Mail Dat To including changes required by the attached Expaper No./Mail Date Paper No./Mail Date Identifying indical such as the application number (see each sheet. Replacement sheet(s) should be labeled as	raftsperson's Patent Drawing Review (PTO-948) attached e, taminer's Amendment / Comment or in the Office action of 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of such in the header according to 37 CFR 1.121(d).
	ne deposit of BIOLOGICAL MATERIAL must be submitted. Note the EMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
Notice of References Cited (PTO-892)	5. Notice of Informal Patent Application

- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date_ 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

Notice of Informal Patent /	Application
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- 6. Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.

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Application/Control Number: 10/623,296

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EXAMINER'S AMENDMENT

 A response was received on 02 January 2008. By this response, Claims 1, 12, and 23 have been amended. Claims 1-5, 7-16, 18-27, and 29-33 are currently pending in the present response.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

IN THE CLAIMS:

Please REPLACE Claim 1 with the following amended claim:

A system comprising:

a controller module comprising instructions for controlling a first component, wherein the controller module is provided dynamically;

a storage system eapable of storing a set of semantic programming that enables a second component to understand the semantics of a set of universal interfaces associated with the controller module; and Application/Control Number: 10/623,296 Page 3

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the second component with a security system that interacts with the controller module to implement a security protocol before the second component can control the first component based on executing the instructions in the controller module, wherein the controller module provides secure control of communications between the first component and the second component, and wherein the security system decrypts an encrypted controller module to perform a portion of the security protocol, the second component controlling the first component based upon the execution of the instructions in the controller module without the second component having prior knowledge of the first component, wherein the stored set of semantic programming enables secure ad hoc interaction between the first and second components.

Oath/Declaration

3. This application presents a claim for subject matter not originally claimed or embraced in the statement of the invention. Specifically, in independent Claim 12, the limitations directed to the new method step of storing a set of semantic programming and other limitations further directed to the semantic programming were not originally claimed as part of Applicant's invention, nor were they embraced in the statement of the invention (see for example, page 2, paragraphs 0004-0006 of the present specification, and also the abstract). Similarly, the limitations directed to corresponding structures in independent Claim 1 and corresponding steps performed in independent Claim 23 were not originally claimed or embraced in the statement of the invention. A supplemental

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oath or declaration is required under 37 CFR 1.67. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02.

4. Applicant is now required to submit a substitute declaration or oath to correct the deficiencies set forth in this communication. The substitute oath or declaration must be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability" (PTO-37). Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136. Failure to timely file the substitute declaration (or oath) will result in ABANDONMENT of the application. The transmittal letter accompanying the declaration (or oath) should indicate the date of the "Notice of Allowance" (PTOL-85) and the application number in the upper right hand corner.

Allowable Subject Matter

- 5. Claims 1-5, 7-16, 18-27, and 29-33 are allowed.
- 6. The following is an examiner's statement of reasons for allowance:

Independent Claim 1 is directed to a system that includes, *inter alia*, a dynamically provided controller module that includes instructions for controlling a first component; storage for a set of semantic programming that enables a second component to understand semantics of universal interfaces associated with the controller; and the second component, that includes a security system that interacts with

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the controller to implement a security protocol before the second component can control the first component, where the security system decrypts an encrypted controller module, where the second component controls the first component using the instructions in the controller module without having prior knowledge of the first component, and where the semantic programming enables secure ad hoc interaction between the first and second components. Independent Claim 12 is directed to a corresponding method, and independent Claim 23 is directed to a software implementation of the method of Claim 12.

The closest prior art, Nakagawa et al, US Patent 6530025, discloses systems, methods, and software largely as claimed (see the previous Office action). However, Nakagawa is silent on the storage of any semantic programming enabling the second component to understand universal interfaces or enabling secure ad hoc interaction between components. "UPnP Device Architecture" generally discloses the use of semantic programming that enables components to understand semantics of universal interfaces (see, for example, page 1, Introduction, "What is UPnP", where the Universal Plug and Play architecture supports zero-configuration, "invisible" networking, and automatic discovery of devices, among other things). However, the UPnP document is silent as to any security measures provided to or enabled for the ad hoc interactions by the semantic programming. Therefore, the present claims are allowable over the cited prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 10/623,296 Page 6

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Edwards et al, US Patent 7296042, is the patent that issued from Application Serial No. 09/838,933, which was incorporated by reference in the present specification (see page 5, paragraph 0016, of the present specification).
 - Edwards et al, US Patent Application Publication 2004/0024787, discloses
 a system that enables arbitrary components on arbitrary networks to
 communicate.
 - c. Edwards et al, US Patent Application Publication 2004/0236943, discloses a system and method that allows components to implement data transfer security including encryption and/or signatures.
 - d. Wolf et al, US Patent 5818447, discusses the use of OLE for application integration by defining standard interfaces which are semantically related.
 - Miller et al, US Patent 5835768, discusses the use of the POSIX standard that established standard semantics for creating portable applications.
 - f. An et al, US Patent 6694368, discloses a system including software buses that are standardized by semantic properties.

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> g. Kumbalimutt et al, US Patent 6871346, discloses a system that includes the definition of a standard set of interfaces having the semantics of the system residing on a server.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571)272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ZAD/ Examiner, Art Unit 2137 Application/Control Number: 10/623,296

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/Emmanuel L. Moise/ Supervisory Patent Examiner, Art Unit 2137